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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,321	10/21/2003	Se-Youn Lim	5000-1-500	4542
33942	7590	11/14/2007		
CHA & REITER, LLC 210 ROUTE 4 EAST STE 103 PARAMUS, NJ 07652			EXAMINER KANG, SUK JIN	
			ART UNIT	PAPER NUMBER
			2619	
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			11/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/690,321	Applicant(s) LIM ET AL.	
	Examiner Suk Jin Kang	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-20** are rejected under 35 U.S.C. 102(e) as being anticipated by **Claseman** (U.S. Patent # 7,177,325 B2).

Consider **claims 1 and 10**, Claseman discloses a method and an OAM sublayer for transmitting OAM (Operation, Administration and Maintenance) packet data by a control multiplexer (42, figure 6, column 6 lines 46-63) of the OAM sublayer (column 5 lines 49-57 and column 6 lines 5-11) in an Ethernet passive optical network (EPON) (column 2 lines 22-30), the OAM sublayer transmitting to a MAC (Medium Access Control) entity MAC client data transmitted from a MAC client (column 6 lines 52-63) and OAM packet data created in an OAM controller (40, figure 6, column 6 lines 53-58), the method comprising the steps of: if OAM packet data is generated by the OAM controller, giving to the OAM packet data priority higher than that given to MAC client data that is in the MAC client and that is waiting to be transmitted (column 6 lines 52-67, column 7 lines 1-14); and multiplexing the OAM packet data and the MAC client data according to the priority and transmitting the multiplexed data to the MAC entity (column

6 lines 52-67, column 7 lines 1-34), wherein all generated OAM packet data are transmitted prior to MAC client data (column 6 lines 52-67, column 7 lines 1-34).

Consider **claims 2 and 11**, and **as applied to claims 1 and 10 above**, respectively, Claseman discloses the method and the OAM sublayer wherein the priority giving step comprises the step of determining whether OAM packet data is generated by the OAM controller (column 6 lines 52-58).

Consider **claim 3**, and **as applied to claim 2 above**, Claseman discloses the method wherein the determining step is performed by a control multiplexer (column 6 lines 52-58 and column 7 lines 22-34).

Consider **claim 4**, and **as applied to claim 3 above**, Claseman discloses the method wherein the multiplexing step is performed by the control multiplexer (column 6 lines 52-58 and column 7 lines 22-34).

Consider **claims 5 and 13**, and **as applied to claims 2 and 11 above**, respectively, Claseman discloses the method and the OAM sublayer wherein the determining step comprises the step of determining whether there presently exists in a queue said MAC client data that is in the MAC client and that is waiting to be transmitted (column 6 lines 58-67 and column 7 lines 1-10).

Consider **claim 6**, and **as applied to claim 5 above**, Claseman discloses the method wherein the determining step is performed by a control multiplexer (column 6 lines 52-58 and column 7 lines 22-34).

Consider **claim 7**, and **as applied to claim 6 above**, Claseman discloses the method wherein the multiplexing step is performed by the control multiplexer (column 6 lines 52-58 and column 7 lines 22-34).

Consider **claim 8**, and **as applied to claim 7 above**, Claseman discloses the method wherein if the MAC client data is determined to not exist in said queue, the multiplexing step comprises the step of assigning priority to the data according to an order in which the data was generated (column 6 lines 52-67 and column 7 lines 1-10) (multiplexing according to an order in which the data is generated is the normal mode of operation according to Claseman whether or not MAC data exists in a queue or not).

Consider **claims 9 and 14**, and **as applied to claims 5 and 13 above**, respectively, Claseman discloses the method and the OAM sublayer wherein if the MAC client data is determined to not exist in said queue, the multiplexing step comprises the step of assigning priority to the data according to an order in which the data was generated (column 6 lines 52-67 and column 7 lines 1-10) (multiplexing according to an order in which the data is generated is the normal mode of operation according to Claseman whether or not MAC data exists in a queue or not).

Consider **claim 12**, and **as applied to claim 10 above**, Claseman discloses the OAM sublayer wherein the control multiplexer is configured to multiplex MAC client data and OAM packet data (column 6 lines 52-63).

Consider **claim 15**, and **as applied to claim 10 above**, Claseman discloses a computer program product having a computer-readable medium containing a computer program executable on a processor (column 6 lines 39-45), said computer program

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comprising the OAM sublayer (column 5 lines 49-57 and column 6 lines 5-11) wherein the control multiplexer (column 6 lines 52-58 and column 7 lines 22-34) is implemented as instructions of said computer program that multiplex the OAM packet data and the MAC client data in accordance with said priority (column 7 lines 5-34).

Consider **claim 16**, and **as applied to claim 15 above**, Claseman discloses the computer program product wherein the control multiplexer is configured for determining whether OAM packet data is generated by the OAM controller (column 6 lines 52-58).

Consider **claim 17**, and **as applied to claim 16 above**, Claseman discloses the computer program product wherein the control multiplexer is configured to multiplex MAC client data and OAM packet data (column 6 lines 52-63).

Consider **claim 18**, and **as applied to claim 17 above**, Claseman discloses the computer program product wherein the control multiplexer is configured for determining whether there presently exists in a queue said MAC client data that is in the MAC client and that is waiting to be transmitted (column 6 lines 58-67 and column 7 lines 1-10).

Consider **claim 19**, and **as applied to claim 16 above**, Claseman discloses the computer program product wherein the control multiplexer is configured for determining whether there presently exists in a queue said MAC client data that is in the MAC client and that is waiting to be transmitted (column 6 lines 58-67 and column 7 lines 1-10).

Consider **claim 20**, and **as applied to claim 15 above**, Claseman discloses the computer program product wherein the control multiplexer is configured for determining whether there presently exists in a queue said MAC client data that is in the MAC client and that is waiting to be transmitted (column 6 lines 58-67 and column 7 lines 1-10).

Response to Arguments

3. Applicant's arguments filed September 13, 2007 have been fully considered but they are not persuasive.

Consider claims 1 and 10, Applicant argues, on page 9 of the remarks that "Claseman fails to recite that assigning a priority to the data entries and determining transmission of the OAM data prior to MAC data based on the assigned priority."

The Examiner respectfully disagrees with Applicant's argument because as recited in the above rejection, Claseman suggests an OAM transmission system with a capability to defer data frames for insertion of OAM frames thereby allowing any or all generated OAM frames to be transmitted prior to data frames from the MAC layer (column 6 lines 52-67, column 7 lines 1-34). Therefore transmission of generated OAM data packets prior MAC client data as claimed by the Applicant is suggested by Claseman.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

6. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Suk Jin Kang whose telephone number is (571) 270-1771. The examiner can normally be reached on Monday - Friday 8:00-5:00 EST.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Suk Jin Kang
S.J.K./sjk

November 2, 2007



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600